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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/707,269	11/06/2000	L. Charles Hardy	53415USA8C.038	9169

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EXAMINER

EVERHART, CARIDAD

ART UNIT PAPER NUMBER

2825

DATE MAILED: 06/11/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/707,269

Applicant(s)

KAISAKI ET AL.

Examiner

Caridad M. Everhart

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 16-35 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 16-35 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

Applicant's arguments filed 5-30-0 have been fully considered but they are not persuasive. Applicant has argued that Kaufman's only solutions which teach a complexing agent, an oxidizer, and a film forming agent also contain particles. This argument is respectfully traversed because the elimination of one element of a composition is obvious when the function performed by the eliminated element is not required (MPEP 2144.04). With respect to the argument that Hudson teaches away from the invention of Kaufman because of the different pH ranges, in the rejection below Hudson is relied upon for its teaching of using a solution without the particles in the case of an abrasive polishing pad only, and not for the solutions taught by Hudson, which are varied depending upon the metal to be polished.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 16-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaufman, et al. (US 5,954,997) in view of Hudson(US 5,972,792) or in view of Hirabayashi, et al.(US 5,575,885).

Kaufman discloses a CMP slurry which includes all three of the agents recited in the instant claims (col. 5, lines 13-18, 43-48, 55-58, and 66-67; col. 6, lines 10-15). Among these are benzotriazole, ammonium oxalate, hydrogen peroxide(col. 10, lines 18-22). Kaufman teaches other additives such as stabilizer may be used (col. 6, lines

46-50). Kaufman teaches the solution without particles(col. 9, lines 32-61). Although this is only for a test of the solutions, the claims being rejected are composition claims, and the stated purpose of the solution is encompassed by Kaufman, as the solution is for use in the formation of a semiconductor device. In addition, as argued above, the elimination of a component is obvious if the function of that component is not required(MPEP 2144.04).

Hudson is relied upon for its teaching that in the use of an abrasive polishing pad, the particles are not required in the solution used for polishing(col. 4, lines 35-65).

Hirabayashi is relied upon for its teaching of polishing solutions with or without particles, depending upon the desired method of polishing(col. 5, lines 9-25 and 47-55; col. 7, lines 43-52; col. 10, lines 22-31).

One of ordinary skill in the art would have been motivated to have used the solution taught by Kaufman without the particles in a system in which the abrasive article was fixed on the polishing pad in view of Hudson or with the different polishing arrangements taught by Hirabayashi, as the particles in the solution would not be required in some of the polishing arrangements and would then be obvious to remove that component of the composition taught by Kaufman(MPEP 2144.04).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Caridad M. Everhart whose telephone number is 703-308-3455. The examiner can normally be reached on Monday through Fridays 7:30-4:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew S. Smith can be reached on 703-308-1323. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9318 for regular communications and 703-872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

C. Everhart
CARIDAD EVERHART
PRIMARY EXAMINER

C. Everhart
June 6, 2003